

REMARKS

The Applicants appreciate the thoroughness with which the subject application has been examined and the indication of allowable subject matter in claims 27, 35, 39, 40 and 44. By this Amendment, claims 20, 21, 24, 37, 38 and 49 have been amended to overcome the Examiner's rejections and objections and more concisely claim and describe the present invention. Claims 20-55 remain in the application for reconsideration by the Examiner. The Examiner's allowance of all pending claims is earnestly solicited.

Examiner Baran has rejected claims 20-25, 28, 29, 33, 36-38, 41-43 and 45-55 under Section 103(a) as unpatentable over Bergstrom (6,115,653) in view of Jarrett (6,345,257). Claim 26 has been rejected under Section 103(a) as unpatentable over Bergstrom and in view of Jarrett in view of McCasland (5,856,931). Claims 30-32 and 34 stand rejected under Section 103(a) as unpatentable over Bergstrom in view of Jarrett in view of Bryan (5,956,664).

To further define the invention over the cited art, the Applicants have amended claim 20 as set forth above in the marked-up version of the claim. In particular, the Applicants have amended the fourth paragraph to claim, "analyzing the sets of performance data, according to the assigned priorities, by a plurality of data analysis tools according to a respective analysis capability limit of each respective tool when a volume of performance data to be analyzed exceeds the analysis capacity of the tool, wherein the analysis capability limit constitutes the volume of performance data that a tool can simultaneously analyze."

With respect to Bergstrom, he discloses a vehicle diagnostic system that includes a plurality of DF (diagnostic function) modules. Each DF module evaluates associated components or sub-systems on the vehicle and generates a diagnostic trouble code indicating an operational fault within the component/sub-system. Bergstrom further, "control[s] the order of executing the evaluation routines of all the DF modules in the diagnostic system from a single DF scheduler." The DF scheduler coordinates priority between the various evaluation routines executed by the DF modules and controls the order of execution of the DF modules. In particular, the DF scheduler, "ensure[s] that as many evaluation routines as possible can be completed, dependent on the prevailing operating conditions, within a given time interval, at the same time that no two evaluation routines are allowed to take place simultaneously if there is a risk that this may result in an erroneous DTC (diagnostic trouble code) being generated." Thus, the problem he attempts to solve relates to the simultaneous execution of diagnostic function

modules on a plurality of components/sub-systems, to avoid “deceiving” a DF module as to the presence of a fault that is in fact not caused by a vehicular condition, but instead is merely a consequence of other executing DF modules. Bergstrom discloses scheduling the evaluation of the components/sub-systems based on operating parameters and the potential for conflicts with other ongoing executing DF modules, wherein such conflicts can cause a DF module to generate a false fault indication.

In contrast, the Applicants’ invention analyzes sets of performance data, each set of performance data having an assigned priority, using a plurality of data analysis tools. An analysis capability limit is associated with each tool, where the limit determines the volume of performance data that a tool can simultaneously analyze when a volume of performance data exceeds the analysis capacity of the tool. Thus, claim 1 as amended is patentably distinct from Bergstrom in that the Applicant’s plurality of data analysis tools each have a respective analysis capability limit. There is no such disclosure or suggestion in Bergstrom. Instead, Bergstrom schedules the analysis without regard to analysis capability limits of the analysis tools, i.e., the DF modules. The concept of an analysis capability limit is not disclosed in Bergstrom.

Support for the claim 20 amendments can be found at several places within the application as originally submitted, but in particular the Examiner’s attention is directed to the paragraph beginning at line 23 on page 6. Here, the Applicants explain that, “one of these parameters sets a limit on the number of simultaneous instantiations for the tool when a normal-priority execution is next in the queue. There is also a separate instantiation limit applicable to high priority tasks in the queue.”

With regard to Jarrett and its application to claim 20, the Applicants suggest that given the amendments to claim 20 as set forth above and the discussion of Bergstrom, claim 20 is now allowable over both Bergstrom and Jarrett.

It is respectfully submitted that each of the rejected dependent claims 21-26, 28-34, 36 and 37, depending directly or indirectly from amended independent claim 20, includes one or more elements that further distinguish the invention over the art of record. These claims should therefore be in condition for allowance. It is noted that claims 21 and 37 have been amended to improve claim readability, and claim 24 has been amended to correct a typographical informality.

Claims 27 and 35 have been objected to but would be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims. While

the Applicants appreciate the indication of allowable subject matter in these claims, the Applicant respectfully submits that these claims are currently in condition for allowance based on the amendments to claim 20 from which they depend. Thus, the rewriting of these claims is held in abeyance pending the Examiner's reconsideration of amended claim 20.

Rejected independent claim 38 has been amended to add the word "historical" so that the third paragraph now reads, "analyzing the sets of recent performance data, according to the assigned priorities, and sets of historical performance data from a look back period, by one or more of a plurality of data analysis tools." With regard to the claimed look back period, the Examiner's attention is directed to line 32 on page 14 through line 5 on page 15. As described therein, the look back time is a period measured from the present to a point in the past during which collected data will be processed by an analysis tool.

The Examiner has cited Bergstrom, lines 59 through 65 of column 7, against this paragraph in Applicants' claim 38. Reference to the cited Bergstrom text does not reveal or suggest a look back period for data evaluation. Instead, the cited text refers to an inhibited list that indicates the evaluation routines that have requested the opportunity to run, but which are not permitted to run. There is no reference in the text to a look back period, i.e., using previously collected data for analysis with sets of recent performance data. Thus, it is suggested that amended claim 38 is allowable over the cited art of record.

Rejected dependent claims 41-43 and 45-48, depending directly or indirectly from amended independent claim 38, each include one or more elements that further distinguish the invention from the art of record. These dependent claims should therefore be in condition for allowance.

Claims 39, 40 and 44, depending from independent claim 38, have been objected to but would be allowable if rewritten in independent form including the limitations of the base claim and any intervening claims. The Applicants appreciate the indication of allowable subject matter in these claims, but at this point are holding the rewriting in abeyance pending Examiner Baran's reconsideration of amended claim 38 from which they depend.

Claim 49 has been amended to overcome the rejection under Bergstrom in view of Jarrett. As can be seen, the Applicants have added a phrase further describing the analysis capability limit. Since the amendment here is similar to the amendment to claim 20 as discussed above, the comments relative to the differences between Bergstrom/Jarrett and the Applicants'

invention relative to claim 20 apply with equal force here. It is therefore believed that claim 49 as amended is patentable over the cited art.

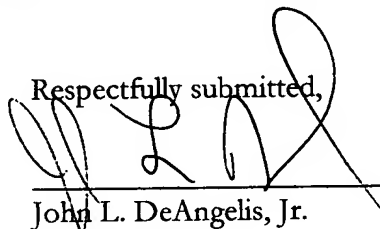
Dependent claims 50-55, depend directly or indirectly from independent claim 49, which has been amended to patentable form in the manner discussed above. Further, these dependent claims contain by virtue of their dependency, all the limitations of the patentable independent claim.

The Applicants have complied with all the points raised in the Office Action and it is believed that the claims remaining in the application, i.e., 20-55, are now in condition for allowance. In view of the foregoing amendments and discussion, it is requested that the Examiner's claim rejections have been overcome. It is respectfully submitted that the Examiner reconsider these rejections and objections and issue a Notice of Allowance for all claims pending in the application.

The Applicants hereby petition for an extension of time of one month under 37 C.F.R. 1.136. A check made payable to the Commissioner for Patents in payment of the extension of time fee is enclosed.

If a telephone conference will assist in clarifying or expediting this Amendment or the claim changes made herein, Examiner Baran is invited to contact the undersigned at the telephone number below.

Respectfully submitted,



John L. DeAngelis, Jr.

Reg. No. 30,622

Beusse Brownlee Wolter Mora & Maire, P.A.

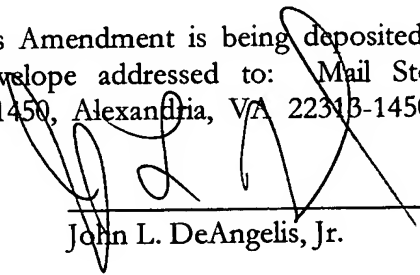
390 N. Orange Ave., Suite 2500

Orlando, FL 32801

(407) 926-7710

CERTIFICATE OF MAILING

I HEREBY CERTIFY that this Amendment is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 26th day of November, 2004.



John L. DeAngelis, Jr.